

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) An ink which shows fluorescence intensity by ultraviolet light comprising

(i) first and second organic compounds which are incompatible with each other;

(ii) at least one of a compound exhibiting fluorescence properties and a coloring material exhibiting fluorescence properties; and

(iii) a liquid medium dissolving or dispersing the components (i) and (ii) therein.

2. (Original) The ink according to Claim 1, wherein the ink is a water-based ink.

3. (Original) The ink according to Claim 1, wherein the liquid medium is water.

4. (Original) The ink according to Claim 1, which is applied to a recording medium from an ink applying means wherein there is a gap between the ink applying means and the recording medium.

5. (Currently Amended) The ink according to Claim 1, wherein the content of the component (ii) in the ink is at most 1.5 % by weight based on the total weight of the ink.

6. (Original) The ink according to Claim 5, wherein the content of the component (ii) in the ink is at most 1.0 % by weight based on the total weight of the ink.

7. (Original) The ink according to Claim 1, wherein the component (ii) is water-soluble or hydrophilic.

8. (Original) The ink according to Claim 1, wherein the content of the component (ii) in the ink is at least a concentration sufficient to exhibit the maximum fluorescence intensity in the ink.

9. (Original) The ink according to Claim 8, wherein the content of the component (ii) in the ink is at least a concentration sufficient to exhibit the maximum fluorescence intensity in a state dissolved in water.

10. (Original) The ink according to Claim 1, wherein the component (i) dissolves, disperses, or dissolves and disperses the component (ii) therein.

11. (Original) The ink according to Claim 1, wherein one of the first and second organic compounds of the component (i) has a solubility parameter value of at least 15, and the other has a solubility parameter value of at most 13.

12. (Original) The ink according to Claim 1, wherein the first and second organic compounds of the component (i) are nonpolar compounds.

13. (Original) The ink according to Claim 1, wherein the first and second organic compounds of the component (i) are both water-soluble.

14. (Original) The ink according to Claim 13, wherein the first and second organic compounds of the component (i) are both liquid.

15. (Original) The ink according to Claim 1, wherein one of the first and second organic compounds of the component (i) has a glycerol group.

16. (Original) The ink according to Claim 15, wherein the organic compound having a glycerol group has at least 3 hydroxyl groups.

17. (Original) The ink according to Claim 15, wherein the organic compound having a glycerol group is liquid at normal temperature.

18. (Original) The ink according to Claim 1, wherein the other of the first and second organic compounds of the component (i) is a nonionic surfactant.

19. (Original) The ink according to Claim 18, wherein the nonionic surfactant is liquid at normal temperature.

20. (Original) The ink according to Claim 18, wherein HLB of the nonionic surfactant is at most 13.

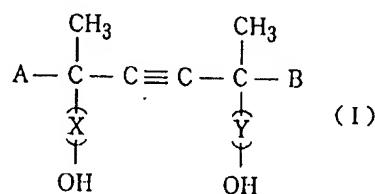
21. (Original) The ink according to Claim 18, wherein the nonionic surfactant has a cloud point.

22. (Original) The ink according to Claim 20, wherein the nonionic surfactant is contained in an amount that the nonionic surfactant is not separated at an interface of an aqueous solution in a state of the aqueous solution.

23. (Currently Amended) The ink according to Claim 22, 20, wherein the nonionic surfactant is contained in an amount that the nonionic surfactant is not separated at an interface of an aqueous solution in a state of the aqueous solution, and wherein the nonionic surfactant is contained in an amount such that in an ink system from which component (ii) has been removed, the nonionic surfactant is not separated at an interface of the ink in a state of an ink from which the component (ii) has been removed.

24. (Original) The ink according to Claim 18, wherein the nonionic surfactant has an acetylene group.

25. (Original) The ink according to Claim 24, wherein the nonionic surfactant has a structure represented by the following general formula (I)



wherein A and B are, independently of each other, C_nH_{2n+1} (n being an integer of 1 to 10), and X and Y are, independently of each other, a ring-opening ethylene oxide unit and/or a ring-opening propylene oxide unit.

26. (Original) The ink according to Claim 18, wherein the nonionic surfactant is contained in a proportion of at least 1 % by weight based on the total weight of the ink.

27. (Original) The ink according to Claim 1, which further comprises a monohydric alcohol.

28. (Original) The ink according to Claim 1, which further comprises a coloring material exhibiting no fluorescence properties.

29. (Original) The ink according to Claim 28, wherein the coloring material exhibiting no fluorescence properties is a coloring material having water solubility.

30. (Original) The ink according to Claim 28, wherein the coloring material exhibiting no fluorescence properties is a coloring material directly coloring a recording medium.

31. (Original) The ink according to Claim 28, wherein the coloring material exhibiting no fluorescence properties is an azo dye.

32. (Original) The ink according to Claim 28, wherein the content of the coloring material exhibiting no fluorescence properties in the ink is not lower than the content of the coloring material exhibiting fluorescence in the ink.

33. (Original) The ink according to Claim 28, wherein the coloring material exhibiting no fluorescence properties has a carboxyl group or its salt group.

34. (Original) The ink according to Claim 28, wherein the counter ion to the hydrophilic group of the coloring material exhibiting no fluorescence properties contains at least one ammonium ion.

35. (Original) The ink according to Claim 1, which further comprises at least one selected from urea and urea derivatives.

36. (Original) The ink according to Claim 35, wherein the urea derivative is not a cyclic compound.

37. (Original) The ink according to Claim 35, wherein the urea derivative is at least one selected from the group consisting of alkyl derivatives of urea and ethylene oxide and/or propylene oxide adducts of urea.

38. (Original) The ink according to Claim 1, which further comprises a compound having a solubility parameter value between the solubility parameter values of the two organic compounds incompatible with each other.

39. (Original) The ink according to Claim 1, which further comprises a compound having a vapor pressure not higher than that of triethylene glycol.

40. (Previously Presented) The ink according to Claim 1, which further comprises a compound having a vapor pressure not lower than that of diethylene glycol

41. (Previously Presented) The ink according to Claim 40, wherein the compound having a vapor pressure not lower than that of diethylene glycol has a solubility parameter between the solubility parameters of the first and the second organic compounds incompatible with each other.

42. (Previously Presented) The ink according to Claim 40 or 41, wherein the compound having a vapor pressure of not lower than that of diethylene glycol is at least one of diethylene glycol and ethylene glycol.

43. (Currently Amended) The ink according to Claim 1, wherein the ink is adjusted to nonionicity in an ink system from which the compound exhibiting fluorescence properties and/or the coloring material exhibiting fluorescence properties, additives and the other coloring material have been removed ~~is nonionic~~.

44. (Original) The ink according to Claim 1, wherein the surface tension of the ink is at most 40 mN/m (dyn/cm).

45. (Original) The ink according to Claim 1, wherein the ink has the pH of at least 8.

46. (Cancelled)

47. (Previously Presented) The ink according to Claim 1, which has a maximum wavelength for excitation and a fluorescence maximum wavelength, and the maximum wavelength for excitation is shorter than the fluorescence maximum wavelength.

48. (Original) The ink according to Claim 1, which is an ink for ink-jet recording.

49. to 84. (Cancelled)

Please add Claim 85, as follows:

85. (New) The ink according to Claim 1, wherein the coloring material is C.I. Acid Red 52, and the content of the coloring material is at most 0.4% by weight based on the total weight of the ink.